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CLINICAL OUTCOMES FOLLOWING UNRESTRICTED USE OF THE EVEROLIMUS-ELUTING STENT AS COMPARED WITH PACLITAXEL- AND SIROLIMUS-ELUTING STENTS

i2 Poster Contributions

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Background: There is currently a paucity of data regarding the clinical outcome of the everolimus-eluting stent (EES) in unselected patients with the whole spectrum of obstructive coronary artery disease as compared to the paclitaxel-eluting stent (PES) and the sirolimus-eluting stent (SES).

Methods: The study cohort comprised 6,615 consecutive patients who underwent coronary artery stent implantation with the EES (519), the PES (2,036) or the SES (4,060) at Washington Hospital Center. Patients who received bare metal stents, the zotarolimus-eluting stent, or two different types of drug-eluting stents were excluded. The clinical endpoints included death, death or Q-wave myocardial infarction (MI), target lesion revascularization (TLR), target vessel revascularization (TVR), definite stent thrombosis (ST) and major adverse cardiac events (MACE), defined as the composite of death, Q-wave MI, or TLR at 1 year.

Results: The groups were well matched for the conventional risk factors for coronary artery disease, except for hypertension, which differed among the three groups. The unadjusted endpoints for the EES and PES were death (4.5% vs. 7.1%; $p=0.03$), TLR (3.4% vs. 4.6%; $p=0.24$), TVR (5.6% vs. 1.1%; $p=0.46$), death or Q-wave MI (4.5% vs. 7.4%; $p=0.02$) and definite ST (0.0% vs. 0.7%; $p=0.09$). The unadjusted endpoints for the EES and SES were death (4.5% vs. 5.2%; $p=0.45$), TLR (3.4% vs. 5.8%; $p=0.3$), TVR (5.6% vs. 8.6%; $p=0.05$), death or Q-wave MI (4.5% vs. 5.4%; $p=0.39$) and definite ST (0.0% vs. 1.08%; $p=0.003$). The rates of MACE were similar among the three groups. Following multivariate analysis, the rate of death or Q-wave MI between the EES and PES groups was no longer significant (HR=1.14; 95% CI=0.59-2.20; $p=0.70$).

Conclusions: This study suggests that the use of EES in routine clinical practice is both safe and effective but offers no advantage in terms of hard endpoints over the PES or the SES.